

## **REMARKS**

Applicant has carefully considered the Office Action dated June 27, 2005 and the references cited therein. Applicant respectfully requests reexamination and reconsideration of the application.

Claims 1-21, 23, 25, 26, 28-36 are currently pending.

Claims 9, 12, 15, and 16 have been withdrawn.

Claims 1, 4-6, 33, and 34 have been amended.

The Examiner has objected to claim 25 for a minor informality. In response, Applicant has amended the claim as suggested by the Examiner and in a manner to overcome such objections. These amendments have not been made to distinguish over any reference of record and no narrowing of any corresponding equivalents to which the amended limitation(s) or claim(s) is/are entitled is intended by these amendments.

In addition, applicant has amended claim 17 to conform the claim language with 35 U.S.C. Section 112, second paragraph. As such, the amendments have been made to clarify the language of the claim, not to distinguish over any other reference of record whether considered singularly or in combination.

Claims 4-6 been amended to return the claims to their language as originally filed.

Claim 32 stands rejected under 35 USC 102(e) as being anticipated by US Patent 6,168, 617, Blaeser et al., hereafter Blaeser. Claim 32 has been amended. Specifically, claim 32 now recites a stent delivery system comprising "a fluid exchange passageway, the fluid exchange passageway including fluid exchange openings that open to an exterior of the catheter, the fluid exchange openings being located proximal and distal of the stent mounting location (claim 32, lines 7-10). Blaeser does not disclose a stent delivery system, as claimed. Specifically, the holes 52 in Figures 4 of Blaeser, cited by the Examiner, are not located proximal and distal of the stent mounting location, as claimed. The distal end of sheath 28 of Blaeser is tucked under elastomeric distal cuff 38. Blaeser does not disclose fluid exchange openings located in distal cuff 38, and, therefore, does not disclose fluid exchange openings both proximal *and* distal of the stent mounting location. The examiner will further note that one of the advantages

of the inventive fluid exchange opening arrangement is that it enables measurement of the pressure gradient across the stent mounting location (Serial No. 09/954,763 page 9, line 9 *et seq*). Conversely, the multiplicity of holes 52 extending through sheath 28 of Blaeser are arranged so closely that no measurable pressure gradient could likely be detected. Accordingly, applicants respectfully assert that claim 32 is not anticipated by Blaeser.

Claims 1-8, 10-11, 13-14, 17-19, 23 and 33-36 stand rejected under 35 USC 102(e) as being anticipated by US Patent 6,786,918, Krivoruchko et al., hereafter Krivoruchko. Claim 1 has been amended and now recites “an admission port extending through a wall of the outer tubular member and in fluid communication with said fluid channel” (claim 1, line 18). A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). Figures 3 and 15 of Krivoruchko, cited by the examiner, do not disclose an admission port extending through a wall of the outer tubular member but merely the open proximal end of the catheter shaft 12. The examiner will note that there does not appear to be any admission port extending through the side wall of outer shaft 26 and in fluid indication with channels 68A-68H.

In addition, limitations similar to those previously recited in claims 20-21, now canceled without prejudice, have been added to claim 1. Specifically, claim 1 has been amended to recite the additional limitations of “a discharge opening in fluid communication with said fluid channel, the discharge opening being located adjacent a distal end of the stent mounting location and extending through a wall of said outer tubular member to permit fluid flow from said admission port and fluid channel to a patient's lumen” (claim 1, line 20-23). None of the figures of Krivoruchko, disclose a discharge opening being located adjacent a distal end of the stent mounting location and extending through a wall of said outer tubular member to permit fluid flow from said admission port and fluid channel to a patient's lumen, as now claimed. In fact, there does not appear to be any discharge opening extending through the side wall of outer shaft 26 of Krivoruchko.

Further, one of the advantages of the present invention is that the claimed admission port fluidly couples a pressure measurement apparatus 72, as illustrated in figure 1, to a plurality of ports 41, 41' in the distal region of the catheter, thereby enabling measurement of the pressure gradient across the stent mounting location (Serial No. 09/954,763; page 9, line 9 *et seq*). Another advantage of the present invention is that the claimed admission port provides an ingress into the fluid channel for delivery of a contrast media, therapeutic agents and other fluids to the plurality of ports 41, 41' in the distal region of the catheter, thereby enabling enhanced imaging and treatment of the patient lumen (Serial No. 09/954,763; page 8, lines 3-14 *et seq*). There is no disclosure within Krivoruchko of using any of the channels 68A-68H as a delivery mechanism for contrast media, therapeutic agents and other fluids, or, as pressure transmitting fluid column for measurement of pressure at the catheter distal end. That channels 68A-68H can be flushed with saline indicates merely that they can be purged of air prior to insertion of the catheter system prior to insertion into the patient's lumen.

In light of the foregoing, applicants respectfully assert that claim 1 is not anticipated by Krivoruchko. Claims 1-8, 10-11, 13-14, 17-19, 23 and 35-36 include all of the limitations of claim 1 and are likewise believed not anticipated by Krivoruchko for at least the same reasons as claim 1, as well as for the merits of their own respective limitations. Claims 33 and 34 have been amended similar to claim 1 (claim 33, line 18-21; claim 34, line 18-21) and are likewise believed not anticipated by Krivoruchko for at least the same reasons as claim 1, as well as for the merits of their own respective limitations.

Applicants also wish to point out to the examiner at this time that claims 1 and 33-34, as amended, are likewise patentable over the combined teachings of Krivoruchko and Blaeser. Blaeser does not teach, disclose, or suggest a fluid path which includes a side admission port in communication with a fluid channel which is in further communication with a discharge port. The examiner will note that the discharge port 60 of Blaeser functions as a hydraulic perfusion port and is used to enable retraction or proximal advancement of sheath 28 by hydraulic actuation (Blaeser, column 5, lines 50-59). In such embodiment, the sheath 28 having a plurality of holes 52 (Blaeser, column 6, lines 9-13; Figure 4) would appear to prevent retraction or

proximal advancement of sheath 28 by hydraulic actuation, as the multiplicity of holes would prevent the buildup of adequate pressure for movement of the sheath in either direction. Such embodiment would appear inoperative. Accordingly, the only embodiment in which sheath 28 with a plurality of holes 52 would appear operative is for means 60 to function as a pullback wire (Blaeser, column 5, lines 23-32). Nor would combining the sheath 28 of Blaeser with the teachings of Krivoruchko render the claimed subject matter obvious. Krivoruchko does not teach, disclose, or suggest an admission port extending through the side wall of outer shaft 26 and in fluid communication with channels 68A-68H. Nor does Krivoruchko does not teach, disclose, or suggest discharge opening located adjacent a distal end of the stent mounting location and extending through a wall of said outer tubular member to permit fluid flow from said admission port and fluid channel to a patient's lumen, as now claimed. In light of the foregoing, applicants respectfully assert that claims 1 and 33-34 are patentable over the teachings of Krivoruchko or Blaeser, singularly or in combinations, or when combined with any other part of record.

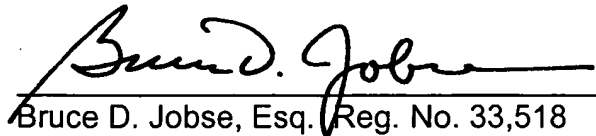
Claims 25-26 and 28-30 stand rejected under 35 USC 103(a) as being unpatentable over US Patent 6,129, 700, Fitz, in view of Blaeser. Claim 25 in its current format specifically recites a stent delivery system comprising "first and second fluid exchange apertures being positioned adjacent to opposite ends of said stent" (claim 25, lines 10-11). In the setting forth the rejection, the Examiner has admitted that Fitz does not disclose fluid exchange apertures both proximal *and* distal of the ends of the stent. For the reasons stated above with reference to the rejection of claim 32 as being anticipated by Blaeser, Blaeser also does not disclose fluid exchange openings both proximal and distal of the ends of the stent. As such, applicants respectfully traverse the above rejections of the grounds that the examiner has failed to create a *prima facie* case of obviousness since the examiner has failed to indicate where the combined teachings of Fitz and Blaeser disclose, teach or suggest all of the limitations of claim 25. Claims 26 and 28-30 include all the limitations of claim 25 and are likewise believed allowable over the combined teachings of Fitz and Blaeser for at least the same reasons as claim 25, as well as for the merits of their own respective limitations.

Claim 30 stands rejected under 35 USC 103(a) as being unpatentable over Fitz in view of US Patent 5,005, 584, Little. In the setting forth the rejection of claim 30, the Examiner has alleged that Fitz discloses all of the limitations of claim 30 except for a pressure measuring device. However, as previously noted, in the setting forth the rejection of claim 25, the Examiner has already admitted that Fitz does not disclose fluid exchange apertures both proximal *and* distal of the ends of the stent. As such, the examiner's admitted deficiency of claim 25 is imputed to claim 30. The examiner has not indicated where Little discloses teaches or suggests the admitted deficiencies of Fitz. Accordingly, applicants respectfully traverse the above rejections of the grounds that the examiner has failed to create a *prima facie* case of obviousness since the examiner has failed to indicate where the combined teachings of Fitz and Little disclose, teach or suggest all of the limitations of the above-identified claim 30, namely first and second fluid exchange apertures positioned adjacent to opposite ends of said stent. If the examiner's intent was to reject claim 30 as being unpatentable over the combined teachings of Fitz and Blaeser in view of Little, that rejection would also fail for the reasons set forth above regarding the failure of the combination of Fitz and Blaeser to provide a basis for a *prima facie* case of obviousness against the claim 25.

Finally, claim 20 has been amended to indicate that the discharge opening in fluid communication with the fluid channel is located proximal the distal end of the outer tubular member. As such, claim 20 is believed to distinguish over the art of record, including Krivoruchko. Claim 21 includes all the limitations of claim 20 and is likewise believed allowable for at least the same reasons as claim 20, as well as for the merits of its own respective limitations.

Applicants believe the claims are in allowable condition. A notice of allowance for this application is solicited earnestly. If the Examiner has any further questions regarding this amendment, she is invited to call Applicant's attorney at the number listed below. The Examiner is hereby authorized to charge any fees or credit any balances under 37 CFR §1.17, and 1.16 to Deposit Account No. 02-3038.

Respectfully submitted,



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